

**LISTING OF THE CLAIMS:**

Claims 1-3 (Canceled)

Claim 4 (Currently Amended): A method for detecting at least one halogen compound, compounds, which comprises bringing a detector agent for detecting a halogen compound, which comprises curcumin as a discoloring component, as claimed in claim 1 into contact with a gas to be detected that may contain a halogen compound, compounds, as said detector agent is disposed ~~on~~ in a position where it can be visually observed, and wherein the halogen compound to be detected is selected from the group consisting of SiH<sub>2</sub>Cl<sub>2</sub>, HF, F<sub>2</sub>, HBr, ClF<sub>3</sub>, TiCl<sub>4</sub>, BCl<sub>3</sub>, HI and mixtures thereof from the outside.

Claim 5 (Currently Amended): A method for detecting at least one halogen compound, compounds, which comprises visually observing ~~from the outside~~ a detector agent for detecting a halogen compound, which comprises curcumin as a discoloring component, wherein the detector agent is as claimed in claim 1, disposed on ~~the~~ an upper layer of a solid treatment agent for removing or decomposing a halogen compound, compounds, as a gas to be treated is caused ~~for treatment~~ to flow from ~~the~~ a bottom side of a container ~~filled with~~ containing said solid treatment agent, whereby a halogen compound is compounds are detected to judge the deterioration of said solid treatment agent, and wherein the halogen compound to be detected is selected from the group consisting of SiH<sub>2</sub>Cl<sub>2</sub>, HF, F<sub>2</sub>, HBr, ClF<sub>3</sub>, TiCl<sub>4</sub>, BCl<sub>3</sub>, HI and mixtures thereof.

Claim 6 (Canceled)

Claim 7 (Currently Amended): A method for detecting at least one halogen compound, compounds, which comprises bringing a detector agent for detecting a halogen compound, which comprises Bromocresol Green as a discoloring component ~~as claimed in claim 2~~, into contact with a gas to be detected that ~~may contain~~ contains a halogen compound, compounds, as said detector agent is disposed ~~on~~ in a position where it can be visually observed ~~from the outside~~.

Claim 8 (Currently Amended): A method for detecting at least one halogen compound, compounds, which comprises bringing a detector agent for detecting a halogen compound, which comprises curcumin as a discoloring component, wherein said discoloring component is supported on granular activated alumina, ~~as claimed in claim 3~~, into contact with a gas to be detected that may contain a halogen compound, compounds, as said detector agent is disposed ~~on~~ in a position where it can be visually observed ~~from the outside~~.

Claim 9 (Currently Amended): A method for detecting at least one halogen compound, compounds, which comprises visually observing ~~from the outside~~ a detector agent for detecting a halogen compound which comprises Bromocresol Green as a discoloring component, wherein the detector agent is ~~as claimed in claim 2~~, disposed on ~~the~~ an upper layer of a solid treatment agent for removing or decomposing a halogen compound, compounds, as a gas to be treated which contains a halogen compound is caused ~~for treatment~~ to flow from ~~the~~ a bottom side of

a container ~~filled with~~ containing said solid treatment agent, whereby a halogen compound is  
~~compounds are~~ detected to judge the deterioration of said solid treatment agent.

Claim 10 (Currently Amended): A method for detecting at least one halogen compound,  
~~compounds;~~ which comprises visually observing ~~from the outside~~ a detector agent for detecting  
a halogen compound, which comprises curcumin as a discoloring component, wherein said  
discoloring component is supported on granular activated alumina, wherein the detector agent  
is as claimed in claim 3; disposed on ~~the~~ an upper layer of a solid treatment agent for removing  
or decomposing a halogen compound, ~~compounds;~~ as a gas to be treated is caused ~~for treatment~~  
to flow from ~~the~~ a bottom side of a container ~~filled with~~ containing said solid treatment agent,  
whereby a halogen compound is ~~compounds are~~ detected to judge the deterioration of said solid  
treatment agent.

Claim 11 (New): A method for monitoring a solid treatment agent for removing or  
decomposing at least one halogen compound present in a gas, comprising:

introducing a gas to be treated which contains a halogen compound to a solid treatment  
agent for removing or decomposing the halogen compound;

introducing the gas flowing from the solid treatment agent to a detector agent for  
detecting the halogen compound, wherein the detector agent comprises Bromocresol Green as  
a discoloring component; and

visually observing the detector agent for discoloration.

Claim 12 (New): The method of claim 11, wherein contact of the halogen compound with the detector agent alone is sufficient to cause discoloration of the discoloring component.

Claim 13 (New): The method of claim 7, wherein the halogen compound to be detected is selected from the group consisting of  $\text{SiH}_2\text{Cl}_2$ , HF,  $\text{Cl}_2$ ,  $\text{BCl}_3$ ,  $\text{SiHCl}_3$ ,  $\text{BF}_3$ ,  $\text{SiF}_4$ ,  $\text{SiCl}_4$ ,  $\text{WF}_6$  and mixtures thereof.

Claim 14 (New): The method of claim 8, wherein the halogen compound to be detected is selected from the group consisting of  $\text{SiH}_2\text{Cl}_2$ , HF,  $\text{F}_2$ , HBr,  $\text{Cl}_2$ ,  $\text{ClF}_3$ ,  $\text{TiCl}_4$ ,  $\text{BCl}_3$ , HI and mixtures thereof.

Claim 15 (New): The method of claim 9, wherein the halogen compound to be detected is selected from the group consisting of  $\text{SiH}_2\text{Cl}_2$ , HF,  $\text{Cl}_2$ ,  $\text{BCl}_3$ ,  $\text{SiHCl}_3$ ,  $\text{BF}_3$ ,  $\text{SiF}_4$ ,  $\text{SiCl}_4$ ,  $\text{WF}_6$  and mixtures thereof.

Claim 16 (New): The method of claim 10, wherein the halogen compound to be detected is selected from the group consisting of  $\text{SiH}_2\text{Cl}_2$ , HF,  $\text{F}_2$ , HBr,  $\text{Cl}_2$ ,  $\text{ClF}_3$ ,  $\text{TiCl}_4$ ,  $\text{BCl}_3$ , HI and mixtures thereof.

Claim 17 (New): The method of claim 11, wherein the halogen compound to be detected is selected from the group consisting of  $\text{SiH}_2\text{Cl}_2$ , HF,  $\text{Cl}_2$ ,  $\text{BCl}_3$ ,  $\text{SiHCl}_3$ ,  $\text{BF}_3$ ,  $\text{SiF}_4$ ,  $\text{SiCl}_4$ ,  $\text{WF}_6$  and mixtures thereof.